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ABSTRACT

A study of 402 kindergarten and first grade students was undertaken tc determine whether screening can predict future school related problems and if the month of birth is significantly related tc the incidence cf schccl prcblems. Screening records were reviewed for each of the Ss, and a Screening Review Fcrm was completed for each S with the follcwirg information: name, date of birth, age at screening, location of screening, screening test administered, parent and teacher ccncerns, screening performance by area, screening cutcomes, screening recommendations, and parent responses to recommendaticns. Findings indicated that when the preschool screening indicated sericus concern in a particular area there was a strong likelihood that the child later received services in that area. The process appeared to be somewhat conservative in identifying children's special needs, especially in the fine motor area. The data (limited) suggested that fewer special services would be delivered if students did nct enter kindergarten until age 5. Among appendixes are the File Review Fcrm, the Parent Interview Form, and the Nursery School Teacher Interview Form. (PHR)

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How to evaluate preschool screening: finding who slips through the screen and constructing the right mesh.

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INTRODUCTION

A team of staff members of the Amherst-Pelham Public Schools initiated a study of the preschool screening process in the Spring of 1979, funded by the Amherst Area Teacher Center. The staff was interested in determining the predictive validity of the preschool screening process as well as determining the strengths and weaknesses of the process for finding children with special needs at an early age. A secondary focus of the research was to investigate the incidence of special needs in kindergarten and first grade by birthdate.

Preschool screening for ages three and four and other childfind activities have been mandated by both Massachusetts Chapter 766 and P.L. 94-142. The intent of these activities is to identify children with special needs at an early age. Early screening and diagnosis rests on the assumption that predicted school problems may be reduced via early treatment.* Although screening programs are beginning or are in operation across the country, little research about the effectiveness of screening at predicting special needs has been done to substantiate the usefulness of the activity. A review of the literature on screening reveals studies in four areas:

1) Concurrent validity studies of specific instruments -- In these studies (Frankenburg et al., 1971; Flook and Velicer, 1977; Klein, 1978 b; Satz and Friel, 1978) the scores on a specific screening test are correlated with scores on more complete assessment batteries or tests.

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*Although treatment was provided to a percentage of those screened, the effects of the treatment were not assessed in this study.

2) Studies of tests or measures that predict school readiness or achievement -- In these studies the authors have chosen one test and correlated the results with a standardized achievement test measure given at a later date (Steinbauer and Heller, 1978; Wells and Peterson, 1978; Klein, 1977, 1978 a, 1978 b; Fry and Ralls, 1977; Bridgemen and Shipman, 1978; Randel, 1977; Glazzard, 1977; Estes, 1967; Kaufman and Kaufman, 1972; Devoid, 1976; Teledgy, 1975). The studies in this group differ from those in group 1 in that they investigate the prediction of school achievement rather than confirmation of disability. In group 1 the authors are trying to determine if a short test which reveals a disability will be substantiated by a longer more complete test, whereas in group 2 the intent is to determine if one test will correlate with later school achievement.

3) Description of background factors or developmental areas that may be predictive of later school problems -- Each of these studies examines a particular indicator such as speech, family history, etc. (Keogh, 1970; Rugel, 1978; Fidone, 1975).

4) Description of preschool screening of vision and hearing -- (Press, 1968; Radke and Blackhurst, 1978; Huddleston, 1974; Coleman and Pelson, 1977).

A review of these four groups lends credence to the notion that specific screening devices frequently correlate well with more complete test batteries or with standardized achievement measures. Many factors or areas of development such as speech and visual-motor functioning appear to correlate well with school achievement. However none of the studies reviewed look at the question of whether a screening instrument

or a multi-method screening strategy can predict future school-related problems or disabilities. The Amherst-Pelham staff sought to answer the question whether a screening process which includes a variety of measures and observations will predict accurately a specific disability or problem in later school functioning. Furthermore, the team wished to know which kinds of problems come to the attention of the screening team and which do not. The study was designed to assess the adequacy of outreach efforts.

Finally, we wished to know if the month of birth was significantly related to the incidence of school problems. Research (by Ilg and Ames et al, 1978) suggests that schools could lessen their special services if children entered school at older ages. In order to maximize school success, they recommend that boys not enter school before they are five-and-a-half and girls are fully five, whereas in the Amherst-Pelham schools children can enter as early as four-years-and-nine-months.

The present study draws on the data collected by the preschool screening team for the past three years. There are some limitations to the data: in some cases, the records were incomplete or not uniform; many of the subjects who were screened have left the district and therefore, could not be followed longitudinally; new entrants to the system do not have records from their early years; and evidence of school problems is limited to kindergarten and grade one. Despite these limitations, we were able to undertake a method of longitudinal analysis of screening as well as offer some preliminary conclusions on the effectiveness of the multi-method screening system.

METHODOLOGY

Subjects:

The subjects for this study were all kindergarten and first grade children attending the five Amherst-Pelham Public Schools in 1978-79. The children were divided into two groups by age:

Cohort I = children in grade one in 1978-79

Cohort II = children in kindergarten in 1978-79

The population by school is as follows:

	Cohort I	Cohort II	
Crocker Farm	40	35	
Fort River	59	39	
Marks Meadow	33	35	
Pelham	16	7	
Wildwood	66	72	
	214	188	Totals

PROCEDURES

Preschool Screening Records:

The records of all of the students who were screened by the preschool screening team in 1976-77 and 1977-78 were reviewed. The subjects were divided into the two cohorts by age rather than by date of screening. Thus, for example, some subjects in Cohort I were screened in 1976 and others in 1977. The population of children screened and still present in the school system, for each cohort was: Cohort I, N=32 and Cohort II, N=24.

During the years 1976-77 the children were screened using an instrument devised by the staff. In 1977-78, three-year-olds were screened using the Denver Developmental Screening Test (Frankenburg and Dodds, 1969) and the four-year-olds were screened using the Eliot-Pearson Screening Inventory (Meisels and Wiske, 1977).

The review of screening records was complete by two staff members of the preschool screening team (Raters A and B). Raters A and B each reviewed half of the files. Inter-rater reliability was assessed by having one rater check the other's forms. There were almost no disagreements in ratings between the two raters. Each rater completed for each screened subject a Screening Review Form (see Appendix A) which detailed the following: name, date of birth, age at screening, location of screening, screening test administered, parent concerns, teacher concerns, screening performance by area (e.g. language, vision), screening outcomes (e.g. re-screen, follow-up), screening recommendations, parent response to screening recommendations.

Current File Review:

In order to correlate the problems identified by screening with later school problems, it was necessary for a third staff member (Rater C) to complete a File Review Form (see Appendix B) on every child currently attending kindergarten and first grade. Rater C visited each of the elementary schools and retrieved information from the school records. This form detailed the following: name, date of birth, present school, date and age of enrollment, nursery school attendance, residence at 3 and 4, services received (or projected) in 1977-78 or 1978-79 by type, dates

of case conferences and CORE evaluations. After recording the names and date of birth of all the students, Rater C met with teachers, counselors and special education teachers at each school to determine the services received by each student (see Appendix C). The rater used one individual as a check on the others to make sure the data was inclusive. For example, Rater C would meet at one time with the counselor and first grade teacher for a school and subsequently with the special education teacher asking all of them about the same students. Rater C did not have access to the original screening data and was thus, not biased by the original prediction.

The File Review Forms on each child were used to determine the frequency and type of special problems for all kindergarten and first grade children.

The first step in the analysis of this objective was to separate out those children who had received any special service in kindergarten and first grade from those who had not. The group who had received services were further divided into those who had lived in Amherst at age three and four (eligible for screening) and those who hadn't. The group eligible for screening were further divided into those who had and had not been screened.

For both groups of eligible children the incidence of problems by type was determined and percentage of children screened and not screened within the problem types was computed. These percentages indicate the proportion in each problem type which comes to the attention of the screening team without regard to whether the problems are correctly identified.

Parent Survey:

The research team also wanted to know why children, who were eligible for screening and later received services, had not come to screening. There were twenty-seven children in this group. A parent interview (see Appendix D) was conducted over the telephone by two research team members to find out the following: 1) if the parents had been aware of screening, 2) if they had concerns about their child's development when the child was three or four, 3) if the child attended nursery school and 4) if the nursery school teacher had concerns about the child's development.

Nursery School Survey:

All of the area nursery schools and day care centers were contacted by telephone and interviewed (see Appendix E). The interview was designed to ascertain the teacher's criteria for referring children to screening as well as their experiences with the screening program.

RESULTS

OBJECTIVE 1: To determine the predictive validity of the preschool screening process. To find out what kind of later problems are accurately predicted by each sub-section of the screening test.

The data from the Screening Review Form and File Review Form for all children who were screened was analyzed using SPSS cross-tabulations. The performance or score (pass, borderline, fail) on each sub-section of the screening tests (located on the Screening Review Form) was correlated with later school services associated with that area (located on File

Review Form). For example, the cognitive section of the screening test was correlated with reading and math, the emotional section with counseling and special education for emotional problems.

Table 1 summarizes the accuracy of each sub-section of the screening test at predicting later problems. In each screening performance column (pass, borderline, fail) the number of children achieving that performance is listed on the right-hand side. On the left-hand side the percentage of that number who received special services for the particular problem later is listed. If children passed the screening test in a given area and received services later, one could conclude that the test was not accurate or if they failed and later did not receive services, it would be considered inaccurate. Children who passed and did not receive services or children who failed and did receive services are accurate predictions.

In almost every case, a high percentage of children who failed a sub-section of the screening test later received relevant services. For example, 100% of the children who failed the speech section at preschool screening received kindergarten and first grade speech services. An interesting phenomenon revealed by the data is that the percentage receiving services rises from kindergarten to first grade thereby increasing the accuracy of the original prediction. For example, only 33% of the children receiving a fail in the emotional area received kindergarten services, whereas, 80% of them received first grade services. It appears that the screening process is best at identifying or predicting special needs in the areas of speech, language, gross motor and math (special education) as measured by the accuracy percentages for fails.

TABLE 1: Accuracy of screening predictions; percentages of children by preschool screening score later serviced in kindergarten and first grade by service areas.

Areas Of Service	Kindergarten Services						First Grade Services					
	Screening Scores						Screening Scores					
	Pass		Borderline		Fail		Pass		Borderline		Fail	
	% Served	N	% Served	N	% Served	N	% Served	N	% Served	N	% Served	N
Reading*												
Title I	2	46	0	4	0	3	3	29				
Special Ed.	11	46	50	4	66	3	14	29	100	1	100	2
Math*												
Title I	0	46	25	4	0	2	0	29	0	1	0	1
Special Ed.	7	46	0	4	100	2	3	29	0	1	100	1
Emotional												
Counseling	8	24	0	19	0	9	6	16	18	11	20	5
Special Ed.	8	24	16	19	33	9	13	16	0	11	80	5
Speech	11	35	25	4	100	12	8	25	33	3	100	3
Language	14	36	33	6	91	11	8	24	25	4	100	3
Fine Motor	0	40	60	10	50	2	4	26	60	5	0	1
Gross Motor	7	45	0	6	100	1	0	26	25	4	100	1
Vision	0	17	0	1	0	1	0	29	0	0	0	1
Hearing	2	43	0	0	13	8	0	27	0	1	0	3

*Cognitive score on screening test used for prediction.

Reading and emotional services are also predicted reasonably well.

When one compares the fails with the borderline scores some interesting facts emerge. In the fine motor area, 60% of the borderlines received services later in kindergarten and first grade. Half or 50% of the borderlines for kindergarten and 100% for first grade received special education for reading. These high percentages indicate that in those two areas the screening process may be conservative or, in other words, it may underpredict the problem.

Small percentages (from 0-14%) of the children receiving a pass at screening received services later. For kindergarten students language services (14%), speech (11%) and reading (11%) have the highest percentages of passes receiving services. These figures shift slightly for first grade where reading (14%) and emotional (13%) are the services with the highest percentages of pass at the preschool level.

Two sections of the data appear different from the rest. First, the percentages of children receiving vision and hearing services are very small (0-13%). It may appear at first glance that the screening process failed children in these areas when services were not warranted. In fact, the reverse is true. When the screening team detected a problem in vision or hearing, in all cases, the parents remedied the problem medically (e.g. acquiring glasses, medical attention for fluid in the ear). After this medical remedy occurred there was no further service that the schools could provide. In some cases of hearing impairment, on-going monitoring by the speech/language/and hearing specialist is required.

In summarizing the results of the predictive accuracy of the preschool screening process it appears that a high proportion of children

receiving fails in any given sub-section will receive the corresponding services in school particularly for speech, language, reading, gross motor and emotional. Services decrease progressively from fail to borderline to pass, and only a small proportion of passes receive services by the end of first grade.

OBJECTIVE 2: To determine which types of problems are most readily and least readily identified by preschool screening.

An overview of the percentages of children receiving regular and special education services in kindergarten and first grade for Cohort I is presented in Table 2 and in kindergarten for Cohort II in Table 3.

For Cohort I it is apparent that a high proportion of the children who are screened (50%) receive services later. The numbers of children receiving services rises from kindergarten to first grade thereby increasing that percentage. Overall, 13.6% of all children receive some service in kindergarten whereas, 31.4% receive some service in first grade. Another 1.8% were in the category where they would be flagged for services or, in other words, considered very likely candidates in the next year.

Table 3 indicates that an even higher percentage (87.5%) of children screened from Cohort II received services in kindergarten as compared to 34% for Cohort I. The percentage of total children receiving services for Cohort II is 18.6% with another 3.1% flagged for the next year.

In Table 4, the question of which particular problems come to the attention of the screening team is analyzed more closely. An attention score (percentage coming to screening) for each service type is presented. Each column gives the percentage of children screened and not screened by service type. The number on the right of each column is the number receiving the service for that group. For example, 56% of the children receiving special education for reading in kindergarten were screened and 44% were not. This represents 10 individuals who were screened and 8 who were not.

TABLE 2: Special Services for Cohort I

	Kindergarten Services (1977-78)	First Grade Services (1978-79)	Flagged For Services (1979-60)
Children Screened N = 32	11 — 34% of children screened	16 — 50% of children screened	0
Children Not Screened But Resident in Amherst	16 — estimated 8% of children not screened but resident	31 — estimated 17% of children not screened but resident	2
Children Not Screened But Not Resident in Amherst	2	20	2
	29 — 13.6% of total children	67 — 31.4% of total children	4 — 1.8% of total children

TABLE 3: Special Services for Cohort II

	Preschool Services (1977-78)	Kindergarten Services (1978-79)	Flagged for Services (1979-80)
Children Screened N = 24	7	20	
		85% of children screened	
Children Not Screened But Resident in Amherst		10	3
		estimated 6% of children not screened but resident	
Children Not Screened But Not Resident in Amherst		5	3
		35	6
		18.6% of total children	3.1% of total children

TABLE 4: Percentages of children screened and not screened who later received services in kindergarten and first grade by service area.

	(Cohort I & II) Children Who Received Kindergarten Services				Children Who Received First Grade Services			
	(56) Screened		(345) Not Screened		(32) Screened		(181) Not Screened	
Services Areas	% Screened	N Served	% Not Screened	N Served	% Screened	N Served	% Not Screened	N Served
Reading								
Title I	0	0	100	10	7	1	92	12
Special Educ.	56	10	44	8	40	6	60	9
Math								
Title I	0	0	100	2	0	0	100	3
Special Educ.	40	2	60	3	50	2	50	2
Emotional								
Counseling	42	9	68	12	40	6	60	15
Special Educ.	75	6	25	2	46	6	54	7
Speech	59	19	41	13	38	6	62	10
Language	52	16	48	15	35	6	65	11
Fine Motor	58	7	42	5	40	4	60	6
Gross Motor	71	5	29	2	50	2	50	2
Vision	66	2	33	1	0	0	100	1
Hearing	50	2	50	2	0	0	100	2
Repeat K	38	3	62	5	--	--	--	--

For kindergarten services the percentage receiving services who were screened hovers around the 50% mark. Some notable exceptions are the Title I services and emotional services. Whereas, none of the Title I students were screened, seventy-five percent of the students receiving help for emotional problems were screened. Only 38% of the children who eventually repeated kindergarten were screened.

In first grade the attention scores on the whole decrease. More of the children receiving services were children who were not screened.

Parent Data:

Telephone interviews were conducted to ascertain why children who later received services didn't come to screening. Of the 27 children who were not screened but were eligible for screening, 24 of their parents were reached by telephone. Almost half of these parents (45%) reported that they knew about preschool screening. The school newsletter was the source of information for a large number. Approximately half of the students attended nursery school. The eleven children attending nursery school attended eight schools (three schools had two students each).

Parents of nursery school students and non-nursery school students were equally informed about screening. The reporting of parent and teacher concerns about development at ages three and four is as follows:

36% of those who knew about screening had some concerns

61% of those who didn't know had some concerns

18% of the parents of nursery students remembered that the teacher had concerns.

Many of the parents who had concerns decided to wait until kindergarten

to see if their concern was justified. One parent knew their child had special needs but indicated that the nursery school "took care of everything". Two parents indicated that they had brought their child to preschool screening but, in fact, they had brought them to kindergarten screening.

Nursery School Data:

The interview data from nursery schools provided important feedback to the staff about the screening procedures from the nursery school's point of view. However, the responses did not provide any clear indications of their criteria for patterns of referral, since they could not discuss individual children for reasons of confidentiality.

OBJECTIVE 3: To determine the impact of month of birth on the incidence of special services.

The month of birth for all children in kindergarten and grade one was determined and grouped as follows:

Group 1 -- birthdate January - April

Group 2 -- birthdate May - August

Group 3 -- birthdate September - December

Group 4 -- birthdate September - December but entry delayed to age 5

The percentage of children in each group by Cohort and school was determined (see Appendix F).

The File Review Forms of all children receiving special services regardless of screening eligibility were analyzed. The incidence of special education services (those received as a result of a TEAM evaluation conference) and regular education services (counseling and Title I

services for which a TEAM evaluation is not necessary) was computed by age group. The percentage of children receiving services in each group was computed.

In Table 5, the incidence of regular and special education of the two Cohorts by age group is detailed. Columns 1 and 2 present the first grade and kindergarten services for Cohorts I and II, respectively. A composite of kindergarten services for Cohort II and first grade services for Cohort I is listed in Column 3. Column 4 lists the total number of children in the age group and Column 5 lists the percentage receiving services.

For the oldest children, age groups 1 and 2, the percentages are within 1 percent of each other (23 and 24%). For the youngest children, group 3 (September - December) 35% of the students received some type of service, an increase of 11% over the next highest group.

In order to determine if this higher percentage was statistically significant, a chi-square list with Yates correction was computed. The incidence of special services was significant at the .05 level for this analysis indicating that the differential between groups could not be accounted for by chance. In other words, the youngest group has a significantly greater chance of receiving special services than the other two older groups.

An interesting comparison can be made between group 3 and the group labeled delayed. The delayed group are those children who are born in the latter third but enter kindergarten at age five rather than age four frequently parents decide on their own (or with the advice of the preschool screening team) that a child will do better in school if they enter at

TABLE 5: Regular and Special Education Services by Age

	COLUMN 1 Cohort I Gr. 1 Services		COLUMN 2 Cohort II Kinder. Services		COLUMN 3 Composite Cohort I & II		COLUMN 4 Total # Enrolled	COLUMN 5 % Receiving Services
	Reg.	Spec. Ed.	Reg.	Spec. Ed.	Reg.	Spec. Ed.		
Group 1 (Jan.-April)	6	14	4	5	10	19	126	23%
Group 2 (May-Aug.)	15	7	5	6	20	13	136	24%
Group 3 (Sept.-Dec.)	14	10	7	8	21	18	109	35%
Delayed Primarily (Sept.-Dec.)	2	3			2	3	30	16%
Totals	37	34	16	19	53	53	401	

an older age. Since the actual numbers of the two groups are quite disparate, it is necessary to compare the percentages receiving services. Only 17% of the delayed group received special services versus 35% of group 3.

Although not all children who enter a year late do so because of an identified problem, many parents respond to suspected immaturity by delaying entry. If we combine the numbers of children whose entry is delayed with the other interventions (services), the percentages of this younger group receiving interventions is even more dramatic.

DISCUSSION

The results of this study provide ample data about the effectiveness of the preschool screening system and the incidence of special services in kindergarten and first grade. Conclusions drawn from these results suggest the need for changes in the system as well as the need for continued monitoring and evaluation. Discussion of the results will proceed by objective.

Objective 1:

The results indicate that when the preschool screening team has serious concerns in a particular area, there is a strong likelihood that the child will receive services in the area at a later date.

If is possible that the children receiving a fail at screening receive services in kindergarten and first grade because the school staff is predisposed to thinking of these children as problems as opposed to the problems actually existing. This self-fulfilling prophecy

explanation is lessened because the results of preschool screening are only released to the schools by specific request of the staff.

Associations between a poor performance at screening and later services were highest when the future service was tied closely or similar to the initial measure. Thus, when the screening team assesses speech at three and again at six the correlations are high. When the future service is not linked closely with the initial measure the results are less accurate. For example, at three and four there are no reading skills which can be measured and, thus, the prediction for reading disability must rely on other skills which are thought to be pre-cursors of reading. Mercer, Algozzine and Trifiletti (1979) in a recent review of early identification research report that "stronger predictive results are evident when there is a positive relationship between the prediction index and the criterion instruments (p. 54).

The increase in the number of services delivered from kindergarten to first grade may reflect staff attitudes towards early identification of special needs. The data suggests that the schools "wait and see" in the first year of kindergarten and by first grade are more ready to identify special needs. Further longitudinal study is necessary to determine what increase, if any, occurs after first grade. The delay in delivering services until first grade opens the question of whether earlier intervention, at the preschool or kindergarten level, is warranted for the children whose screening scores indicate a possible problem.

The preschool screening process appears to be somewhat conservative in identifying children's special needs as shown by the data on borderlines and passes. Fine motor is one specific area where the process

underpredicts. Evaluation and possible change of this sub-test for this area is warranted. The standards for passing the fine motor sub-test at the preschool level may not be stringent enough.

Objective 2:

The incidence of problems in children screened has increased over the last few years. The percentage of children screened in Cohort II (who are younger) receiving services is higher than Cohort I. It is possible to conclude that parents and nursery school teachers are becoming more aware about their children's development and/or more aware of what types of problems should be screened. Increased outreach efforts in the last year have begun to show their effect in the kindergarten data.

An analysis of the parent interview data reveals that only half of those interviewed knew about screening, suggesting the need for increased outreach. Furthermore, parents do not easily recognize potential learning problems and when they do, they have a tendency to "wait and see" what happens in kindergarten. Parent reports indicate only a small percentage of these special needs children had been identified in nursery school. Many possible explanations exist for this parent perception: 1) the nursery teacher did identify the child but didn't tell the parent, 2) the nursery teacher did tell the parent but he/she forgot, or 3) the nursery teacher did not identify. Issues of confidentiality prevented the team from tracing back to the nursery teacher to determine the accuracy of parent perceptions.

Overall, the data from Objectives 1 and 2 suggests that the preschool screening prediction is reasonably accurate. A greater problem for the

screening team is outreach, that is, insuring that more of the potential special needs children enter the screening process.

Objective 3:

The significance of young age as a predictor of special services is consistent with the recent research of Ilg and Ames et al (1978) nationally as well as the findings of area school districts such as the ones in the Hampshire Regional School District. Further research in grades 2 through 6 about the incidence of special services by age is necessary to conclude that age is an important factor for school problems in Amherst-Pelham. However, the limited data on kindergarten and first grade students strongly suggests that fewer special services would be delivered if students did not enter kindergarten until age five. Children born in the latter third who wait until age five to enter school have less of a chance of needing special services than if they entered at four. At a minimun, this study suggests the need for evaluation at entry for those students who are born in the last third of the year to determine school readiness.

The school district must evaluate this research along with other studies to determine if a change in school entry dates or procedures is warranted. Additionally, the school must consider the advisability of continuing this research longitudinally to gather further data.

APPENDIX A

SCREENING REVIEW FORM

Cohort: I II

☐ Screened V/H Only

☐ Complete Screening

Name: _ __ _____ ___ _____ Birthdate: ___ _ _ _____

Age at screening: _____ ___ __

Screening Location: _ Nursery School __Public School Building

Screening Date: _____

Referred for screening by: ___Parent ___Physician

___Teacher ___Other

Screening Instruments: ___Amherst ___EPSI ___Denver

Problem Areas	Parent Concern	Teacher Concern	Screening Outcome P	B	F
Cognitive					
Emotional					
Speech					
Language					
Fine Motor					
Gross Motor					
Vision					
Hearing					

Screening Follow Up:

___None
___Nursery School Observation
___Parent Interview/Consultation
___Speech and Language Testing
___Vision Referral
___Hearing Examination
___Medical Referral
___Other

Screening Outcome/s

___Parents ignore recommendation/ refuse care

Pre-School Services Provided:
Nursery School Placement for:

___Cognitive
___Speech
___Emotional
___Language
___Fine Motor
___Gross Motor
___Other

Other Services (non-class placement)

Amherst Preschool Program:

___Speech
___Language
___Parent group for behavior manage
___Nursery school consultation
___Parent consultation/home teach

Other Providers:

___Psychological services (privat
___Vision examined/treated
___Hearing examined/treated
___UMass speech and language
___Other

APPENDIX B

FILE REVIEW FORM

Cohort: I II

☐ Screened

☐ Not Screened

Name: _____ _____

Present School: FP CF WW MH PS

Date of Birth: _____ (month/day/year) ☐ Check if post-Sept. 1.

☐ Check if entry delayed (Sept.-Dec.) birthday

Enrollment date: _____ (month/year)

Grade entered at enrollment: K 1 2

Nursery School/s: _____

Resident in Amherst at age 3? ___Yes ___No ___Don't Know

Resident in Amherst at age 4? ___Yes ___No ___Don't Know

Kindergarten Speech and Language Review

☐ No review form in file

Problems Identified:

___None
___Language
___Articulation
___Voice
___Fluency
___Hearing

Therapy Needs:

___Yes
___No
___Re-check

Kindergarten EPSI Score

Additional Information:

*Note:
For Cohort I, age 3: 1975-76
For Cohort I, age 4: 1976-77

For Cohort II, age 3: 1976-77
For Cohort II, age 4: 1977-78

Special Service Review

Group Interview No. ___

Service Received	1977-78	1978-79
No Intervention		
Special Education Psychological/Cognitive Reading		
Math		
Emotional		
Speech		
Language		
Fine Motor		
Gross Motor		
Vision		
Hearing		
Title I Reading		
Title I Math		
Counselling		
Other (Specify:)		
Repeated Kindergarten		

Case Conference Dates:

Core Evaluation Date:

Code _____

+ services
F flag for next grade
R refused/resistant (parent)
E evaluation completed (but not served)

Coder _____

APPENDIX C

March 30, 1979

TO: Elementary Principals
Kindergarten and First Grade Teachers
Elementary Counselors
Early Childhood Specialists
Speech Staff

FROM: Judith Souweine for:
Sheila Crimmins
Ellen Berson
Ken Chapman
Karen Dimock

RE: Evaluation of Preschool Screening

The above people listed as "From" are a team working on a research project which has been funded by the Amherst Area Teacher Center. We will be trying to answer the following questions:

1) What kinds of later school problems can be accurately predicted by the preschool screening process? (What is the predictive validity?)

2) What types of school problems are most readily and least readily identified by preschool screening?

3) How should the screening be changed in light of the findings?

4) How can screening (both preschool and kindergarten) be evaluated on an on-going basis in the future?

In order to answer these questions we will be completing the following tasks at each elementary school:

1. Coding records of kindergarten and first grade children for 1977-79.

2. Interviewing kindergarten and first grade teachers, speech therapists, counselors and early childhood specialists to acertain any special attention (e.g. speech service, Title I, special education, counseling)this population has received. It will probably be most efficient to complete these interviews at each school in a group meeting. **All data collected will be kept confidential. Reports of this study will contain no names.

In the near future Sheila Crimmins will be contacting the school counselor to set up this meeting for your school. Your cooperation in this project is obviously essential and also appreciated. When Sheila comes to the school she will be able to explain the project in more detail. If any of you would like a copy of the proposal before that time, call me at Fort River (253-9731).

cc. John Burgess
Don Frizzle
Bob Murphy

APPENDIX D

PARENT INTERVIEW - Preschool screening evaluation project

"Hello, my name is _____ and I am a staff member of the Amherst Public Schools. The Amherst Area Teacher Center has funded a study of the effectiveness of the Preschool screening program. We are calling a sample of parents of kindergarten and first grade children. Individual information will be held confidential. Would you be kind enough to answer some questions about the time when your child was a preschooler?"

PARENT INTERVIEW

Parents names: _____
Phone # _____
K or 1
Person answering question ___ Mother ___ Father ___ Other ___
Interviewer _____
Date _____

1. Were you living in Amherst when your (kindergarten) (first grade) child was 3? Yes ___ No ___
   4? Yes ___ No ___

2. Did your child attend nursery school at age 3?
   Yes ___ No ___ School: _____
   at 4? Yes ___ No ___ School: _____

3. When your child was 3 and 4 were you aware that the Amherst-Pelham School System held preschool screening which looks for young children who may have special needs? Yes ___ No ___

   If yes, how did you become aware of this? _____

4. Did you have any concerns about any of the following aspects of your child's development when he/she was 3 or 4?
   vision .. Yes ___ No ___
   hearing .. Yes ___ No ___
   physical development .. Yes ___ No ___
   academic development .. Yes ___ No ___
   speech and language .. Yes ___ No ___
   Social-emotional development .. Yes___ No ___

   I no to all,
   Did you have concerns about any other aspect of your child's development at that time?

5. Did you consider bringing your child to preschool screening?
   Yes ___ No ___

   If yes, what prevented you?

6. Only if child attended nursery school
   Did your child's nursery teacher have any concerns about your child's development? Yes ___ No ___ Can't remember ___

If yes, what was the nature of the concern?

If yes, did the teacher recommend preschool screening to you?

Thank you very much for taking the time to answer these questions --

APPENDIX E

NURSERY SCHOOL TEACHER INTERVIEW

Teacher _____ Interviewer _____

School _____ Date _____

Introduction: "I am a staff member of the Amherst Public Schools. The Amherst Area Teacher Center has funded a study of the effectiveness of the Preschool Screening program. Would you be able to answer some questions about screening?"

1. Have you ever recommended to parents that they bring their childre to preschool screening at the public schools or at a screening at your school administered by the public schools? Yes ___ No ___

   Approximately how many each year? _____

   Of those that you recommended how many were screened? _____

   What problems have you referred for?

   What criteria do you use in referring for screening?

   Have you had the experience that parents do not go along with your recommendation to have their child screened?

   Why do you think they don't?

2. Has the preschool screening team administered a screening at your school this year? Yes ___ No ___
   last year? Yes ___ No ___
   the year before? Yes ___ No ___
   if no, go to 3
   if yes, go to 4

3. Would you want the screening team to come to your school? Yes ___ No ___

4. What improvements, if any, could be made in the preschool screening process either at your school or at the screenings administered at the public school?

APPENDIX F

Distribution By Age & School

			1	2	3	4
Crocker Farm -75-	I		8	18	10	4
	II		14	9	9	3
			22	27	19	7
Pelham School -22-	I		4	3	7	1
	II		3	2	2	0
			7	5	9	1
Wildwood -138-	I		21	21	17	7
	II		21	28	21	2
			42	49	38	9
Fort River -98-	I		22	20	12	5
	II		11	12	13	3
			33	32	25	8
Marks Meadow -68-	I		9	12	8	4
	II		13	11	10	1
			22	23	18	5
I & II Totals by age		401	126	136	109	30
			31%	33%	27%	7%
	I		64	74	54	21
	II		62	62	55	9

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